

Mononucleosomes Recombinant Protein

Recombinant Mononucleosomes (H3.1)

CATALOG # AAA60118	HOST E Coli
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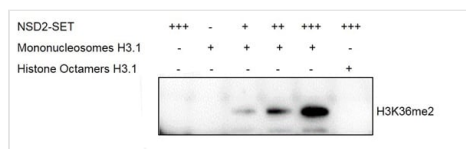
PRODUCT SYNONYMS

Mononucleosomes; Recombinant Mononucleosomes (H3.1); Mononucleosomes recombinant protein

PRODUCT SPECIFICATIONS

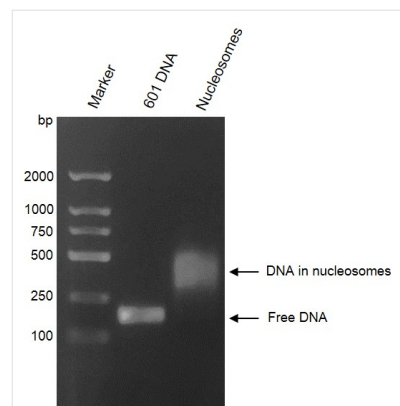
Host	E Coli
Form/Format	Recombinant Mononucleosomes (H3.1)(50ug protein + 50ug DNA) are supplied in 10mM Tris-HCl pH8.0, 1mM EDTA, 2mM DTT and 20% glycerol.
Protein Species	Human
Notes	This product was manufactured as described in Protein Details. Where possible, We has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet..
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



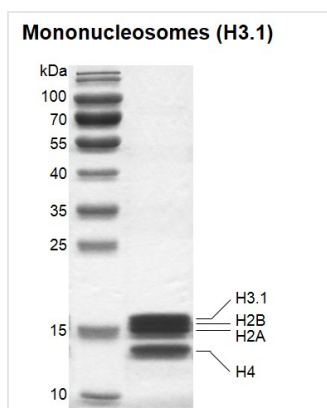
WB (Western Blot)

Western Blot for activity detection of Mononucleosomes (H3.1) 2 ug Recombinant Mononucleosomes (H3.1) were incubated with different concentrations of DOT1L in reaction buffer for 3 hours at room temperature, respectively. Western blot was used to detect the generation of reaction products (H3K79me1). Recombinant Histone Octamers were used as control substrates. The Western Blot result showed that nucleosomes were more suitable substrate for DOT1L than histone octamers.



Application Data

Recombinant Mononucleosomes (H3.1) DNA agarose gel Mononucleosomes (H3.1) were run on an agarose gel and stained with ethidium bromide. Lane 1: DNA Marker. Lane 2: 601 DNA which was used for assembly of nucleosomes. Lane 3: Intact nucleosome. Intact nucleosomes migrate much higher than free DNA. The agarose gel result shows almost all of 601 DNA wrapped histone octamer has assembled to form nucleosomes.



SDS-PAGE

Recombinant Mononucleosomes (H3.1) SDS-PAGE gel 12.5% SDS-PAGE Coomassie staining MW: 108 kDa Purity: >95%

ADDITIONAL INFORMATION

Related Product Information for Mononucleosomes recombinant protein

Short Description: Recombinant Mononucleosomes (H3.1) consist of a 167 bp of 601 DNA without any tag and two molecules each of histones H2A that includes amino acids 1-130 (end)(accession number NM_003512), H2B that includes amino acids 1-126 (end)(accession number NM_003518), H3.1 that includes amino acids 1-136 (end)(accession number NM_003529), and H4 that includes amino acids 1-103 (end)(accession number NM_003548). All of these histones were expressed in E Coli. The molecular weight of histone octamer is 108 kDa. Nucleosomes comprise the smallest subunit of chromatin; they consist of 147 bp of DNA wrapped around an octamer of core histone proteins (H2A, H2B, H3 and H4). Therefore, nucleosomes are more physiologically relevant substrates than histones and histone-derived peptides for use in in vitro studies. More importantly, some histone methyltransferases are significantly more active, as well as specific, when using nucleosomal substrates in HMT assays, such as DOT1L and NSD family enzymes. Nucleosomes are also widely used in histone methyltransferase screening assays to identify small molecular inhibitors for drug discovery.

Background: In vivo, histones are wrapped around by DNA in chromatin. Therefore, nucleosomes are more physiologically relevant substrates than histones and histone-derived peptides for in vitro studies. More importantly, some histone methyltransferases are significantly more active, as well as specific, when using nucleosomal substrates in HMT assays, such as DOT1L and NSD family enzymes. Nucleosomes are also widely used in histone methyltransferase screening assays to identify small molecular inhibitors for drug discovery.

Product Categories/Family for Mononucleosomes recombinant protein

Recombinant Proteins; Histone

NCBI AND UNIPROT INFORMATION

NCBI GenBank Nucleotide # [NM_003512](#)

Molecular Weight Molecular weight of histone octamer is 108kDa

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/mononucleosomes-recombinant-protein-e-coli/60118>